

# Blast SEQ ID NO:1 versus human genomic

MEGABLAST 1.2.3-Paracel [2001-11-20]

## Reference:

Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),  
"A greedy algorithm for aligning DNA sequences",  
J Comput Biol 2000; 7(1-2):203-14.  
Database: Homo\_sapiens.latestgp.masked.fa  
44,521 sequences; 200,768,834,160 total letters

Query= LEX161seqid1  
(2115 letters)

Sequences producing significant alignments:  
Value

Score E  
(bits)

AC016643.6.1.179969	734	0.0
AC008958.7.1.109526	520	e-
144		

>AC016643.6.1.179969  
Length = 179969

Score = 734 bits (370), Expect = 0.0  
Identities = 370/370 (100%)  
Strand = Plus / Plus

Query: 957 agatgatttaagccagaagttaaaacccttgggtgaagcagaacgagagtttattttgaa  
1016  
Sbjct: 60550 agatgatttaagccagaagttaaaacccttgggtgaagcagaacgagagtttattttgaa  
60609

Query: 1017 tttgaagaaaaaggaatgcaaagacaggggttttgaatatgatgggaaaatcaatgcctg  
1076  
Sbjct: 60610 tttgaagaaaaaggaatgcaaagacaggggttttgaatatgatgggaaaatcaatgcctg  
60669

Query: 1077 ggatctatattactacatgactcagacagaggaactcaagtattccatagaccaagagtt  
1136  
Sbjct: 60670 ggatctatattactacatgactcagacagaggaactcaagtattccatagaccaagagtt  
60729

Query: 1137 cctcaaggaataacttcccaattgaggtgggtcactgaaggcttgctgaacacctaccagga  
1196  
Sbjct: 60730 cctcaaggaataacttcccaattgaggtgggtcactgaaggcttgctgaacacctaccagga  
60789

Query: 1197 gttgttgggactttcatttgaacaaatgacagatgctcatgtttggaacaagagtgttac.  
1256  
|||||  
Sbjct: 60790 gttgttgggactttcatttgaacaaatgacagatgctcatgtttggaacaagagtgttac  
60849

Query: 1257 actttatactgtgaaggataaagctacaggagaagtattgggacagttctatttggacct  
1316  
|||||  
Sbjct: 60850 actttatactgtgaaggataaagctacaggagaagtattgggacagttctatttggacct  
60909

Query: 1317 ctatccaagg 1326  
|||||  
Sbjct: 60910 ctatccaagg 60919

Score = 520 bits (262), Expect = e-144  
Identities = 262/262 (100%)  
Strand = Plus / Plus

Query: 40 agagttggtggtccaggattttactcagaatgacgtttaggaagagaagtgatgtctcct  
99  
|||||  
Sbjct: 30994 agagttggtggtccaggattttactcagaatgacgtttaggaagagaagtgatgtctcct  
31053

Query: 100 cttcaggcaatgtcttctatactgtggctggcagaaatgttttaagatgggatctttca  
159  
|||||  
Sbjct: 31054 cttcaggcaatgtcttctatactgtggctggcagaaatgttttaagatgggatctttca  
31113

Query: 160 ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat  
219  
|||||  
Sbjct: 31114 ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat  
31173

Query: 220 gctgttggaatgctcggatttgaggaagtaacttacgagaactgtctgcaggcactggca  
279  
|||||  
Sbjct: 31174 gctgttggaatgctcggatttgaggaagtaacttacgagaactgtctgcaggcactggca  
31233

Query: 280 gatgtagaagtaaagtatatag 301  
|||||  
Sbjct: 31234 gatgtagaagtaaagtatatag 31255

Score = 405 bits (204), Expect = e-110

Identities = 204/204 (100%)  
Strand = Plus / Plus

Query: 1324 agggaaggaaaatacaatcatgcggcctgcttcggtctccagcctggctgccttctgcct  
1383

Sbjct: 64886 agggaaggaaaatacaatcatgcggcctgcttcggtctccagcctggctgccttctgcct  
64945

Query: 1384 gatggaagccggatgatggcagtggtgcctcgtggtgaacttctcacagccagtggca  
1443

Sbjct: 64946 gatggaagccggatgatggcagtggtgcctcgtggtgaacttctcacagccagtggca  
65005

Query: 1444 ggtcgtccctctctcctgagacacgacgaggtgaggacttactttcatgagtttggtcac  
1503

Sbjct: 65006 ggtcgtccctctctcctgagacacgacgaggtgaggacttactttcatgagtttggtcac  
65065

Query: 1504 gtgatgcatcagatttggtgcacag 1527

Sbjct: 65066 gtgatgcatcagatttggtgcacag 65089

Score = 379 bits (191), Expect = e-102  
Identities = 191/191 (100%)  
Strand = Plus / Plus

Query: 1526 agactgattttgcacgatttagcggaacaaatgtggaaactgactttgtagaggtgccat  
1585

Sbjct: 81947 agactgattttgcacgatttagcggaacaaatgtggaaactgactttgtagaggtgccat  
82006

Query: 1586 cgcaaatgcttgaaaattgggtgtgggacgtcgattccctccgaagattgtcaaaacatt  
1645

Sbjct: 82007 cgcaaatgcttgaaaattgggtgtgggacgtcgattccctccgaagattgtcaaaacatt  
82066

Query: 1646 ataaagatggaagccctattgcagacgatctgcttgaaaaacttggtgcttctaggctgg  
1705

Sbjct: 82067 ataaagatggaagccctattgcagacgatctgcttgaaaaacttggtgcttctaggctgg  
82126

Query: 1706 tcaacacaggt 1716

Sbjct: 82127 tcaacacaggt 82137

Score = 323 bits (163), Expect = 2e-85  
Identities = 163/163 (100%)  
Strand = Plus / Plus

Query: 661 ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa  
720  
Sbjct: 53694 ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa  
53753

Query: 721 attaccttaaaaatatccacactatttcctgtcatgaagaaatggtgtatccctgaaacc  
780  
Sbjct: 53754 attaccttaaaaatatccacactatttcctgtcatgaagaaatggtgtatccctgaaacc  
53813

Query: 781 agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 823  
Sbjct: 53814 agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 53856

Score = 301 bits (152), Expect = 8e-79  
Identities = 152/152 (100%)  
Strand = Plus / Plus

Query: 300 agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc  
359  
Sbjct: 35386 agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc  
35445

Query: 360 agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg  
419  
Sbjct: 35446 agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg  
35505

Query: 420 agatatatttgagagaattgttcatttacagg 451  
Sbjct: 35506 agatatatttgagagaattgttcatttacagg 35537

Score = 280 bits (141), Expect = 3e-72  
Identities = 141/141 (100%)  
Strand = Plus / Plus

Query: 1842 aggcacaaatatgccagctacctttggacatttggcagggggatagcatggccaatatta  
1901

Sbjct: 84687 aggcacaaatatgccagctaccttttgacatttggcagggggatacggatggccaatatta  
84746

Query: 1902 tggatatcttttgagtggaagtattttccatggatatgttttacagctgttttaaaaaaga  
1961

|||||  
Sbjct: 84747 tggatatcttttgagtggaagtattttccatggatatgttttacagctgttttaaaaaaga  
84806

Query: 1962 agggataatgaatccagaggt 1982

|||||  
Sbjct: 84807 agggataatgaatccagaggt 84827

Score = 270 bits (136), Expect = 3e-69  
Identities = 137/138 (99%)  
Strand = Plus / Plus

Query: 821 aggaaaacaccataattttgcagcagctactcccactggaaccaaggtggccaaactac  
880

|||||  
Sbjct: 58207 aggaaaacaccataattttgcagcagctactcccactggaaccaaggtggccaaactac  
58266

Query: 881 tcggttatagcacacatgctgacttcgtccttgaaatgaacactgcaaagagcacaagcc  
940

|||||  
Sbjct: 58267 tcggttatagcacacatgctgacttcgtccttgaaatgaacactgcaaagagcacaagcc  
58326

Query: 941 gcgtaacagcytttctag 958

|||||  
Sbjct: 58327 gcgtaacagcctttctag 58344

Score = 268 bits (135), Expect = 1e-68  
Identities = 136/137 (99%)  
Strand = Plus / Plus

Query: 1979 aggttggaatgaaatacagaaacctaactctgaaacctgggggatctctggacggcatgg  
2038

|||||  
Sbjct: 95214 aggttggaatgaaatacagaaacctaactctgaaacctgggggatctctggacggcatgg  
95273

Query: 2039 acatgctccacaatttcttgaaacgtgagccaaacaaaaagcggttcctaatagtagtagag  
2098

|||||  
Sbjct: 95274 acatgctccacaatttcttgaaacgtgagccaaacaaaaagcggttcctaatagtagtagag  
95333

Query: 2099 gcctgcatgctycgtga 2115  
|||||||  
Sbjct: 95334 gcctgcatgctccgtga 95350

Score = 262 bits (132), Expect = 7e-67  
Identities = 132/132 (100%)  
Strand = Plus / Plus

Query: 1713 aggtcttctgaccctgcgccagattgttttgagcaaagttgatcagtctcttcataccea  
1772  
|||||||  
Sbjct: 82469 aggtcttctgaccctgcgccagattgttttgagcaaagttgatcagtctcttcataccea  
82528

Query: 1773 cacatcgctggatgctgcaagtgaatatgccaaatactgctcagaaatattaggagttgc  
1832  
|||||||  
Sbjct: 82529 cacatcgctggatgctgcaagtgaatatgccaaatactgctcagaaatattaggagttgc  
82588

Query: 1833 agctactccagg 1844  
|||||||  
Sbjct: 82589 agctactccagg 82600

Score = 222 bits (112), Expect = 6e-55  
Identities = 116/117 (99%), Gaps = 1/117 (0%)  
Strand = Plus / Plus

Query: 443 atttacaggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa  
502  
|||||||  
Sbjct: 49854 attt-caggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa  
49912

Query: 503 agtcaattaaaatggggaaaagaaatgggctccatcttctgaacaagtacagaatg 559  
|||||||  
Sbjct: 49913 agtcaattaaaatggggaaaagaaatgggctccatcttctgaacaagtacagaatg  
49969

Score = 208 bits (105), Expect = 1e-50  
Identities = 105/105 (100%)  
Strand = Plus / Plus

Query: 559 gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc  
618  
|||||||  
Sbjct: 52613 gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc  
52672

Query: 619 aatgaggatgataccttccttgatattttccaaggctgaacttgg 663  
|||||  
Sbjct: 52673 aatgaggatgataccttccttgatattttccaaggctgaacttgg 52717

>AC008958.7.1.109526  
Length = 109526

Score = 520 bits (262), Expect = e-144  
Identities = 262/262 (100%)  
Strand = Plus / Minus

Query: 40 agagttggtggttcaggattttactcagaatgacgttaggaagagaagtgatgtctcct  
99  
|||||  
Sbjct: 24199 agagttggtggttcaggattttactcagaatgacgttaggaagagaagtgatgtctcct  
24140

Query: 100 cttcaggcaatgtcttcctatactgtggctggcagaaatgttttaagatgggatctttca  
159  
|||||  
Sbjct: 24139 cttcaggcaatgtcttcctatactgtggctggcagaaatgttttaagatgggatctttca  
24080

Query: 160 ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat  
219  
|||||  
Sbjct: 24079 ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat  
24020

Query: 220 gctggtggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca  
279  
|||||  
Sbjct: 24019 gctggtggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca  
23960

Query: 280 gatgtagaagtaaagtatatag 301  
|||||  
Sbjct: 23959 gatgtagaagtaaagtatatag 23938

Score = 323 bits (163), Expect = 2e-85  
Identities = 163/163 (100%)  
Strand = Plus / Minus

Query: 661 ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa  
720  
|||||  
Sbjct: 1504 ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa  
1445

Query: 721 attaccttaaaatatccacactatttcctgtcatgaagaaatgttgatccctgaaacc  
780  
|||||  
Sbjct: 1444 attaccttaaaatatccacactatttcctgtcatgaagaaatgttgatccctgaaacc  
1385

Query: 781 agaagaaggatggaaatggcttttaatacaagggtgcaaagagg 823  
|||||  
Sbjct: 1384 agaagaaggatggaaatggcttttaatacaagggtgcaaagagg 1342

Score = 301 bits (152), Expect = 8e-79  
Identities = 152/152 (100%)  
Strand = Plus / Minus

Query: 300 agtggaaaggaccatgctagactttcccagcatgtatcctctgacaaagaagtacgagc  
359  
|||||  
Sbjct: 19806 agtggaaaggaccatgctagactttcccagcatgtatcctctgacaaagaagtacgagc  
19747

Query: 360 agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg  
419  
|||||  
Sbjct: 19746 agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg  
19687

Query: 420 agatatatttgagagaattgttcatttacagg 451  
|||||  
Sbjct: 19686 agatatatttgagagaattgttcatttacagg 19655

Score = 222 bits (112), Expect = 6e-55  
Identities = 116/117 (99%), Gaps = 1/117 (0%)  
Strand = Plus / Minus

Query: 443 atttacaggaaacctgtgatctggggaagataaaacctgaggccagacgataacttgaaa  
502  
|||||  
Sbjct: 5344 attt-caggaaacctgtgatctggggaagataaaacctgaggccagacgataacttgaaa  
5286

Query: 503 agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg 559  
|||||  
Sbjct: 5285 agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg 5229

Score = 208 bits (105), Expect = 1e-50  
Identities = 105/105 (100%)  
Strand = Plus / Minus

Query: 559 gaaatcaaataaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc  
618

|||||  
Sbjct: 2585 gaaatcaaataaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc  
2526

Query: 619 aatgaggatgataccttccttgatattttccaaggctgaacttggt 663

|||||  
Sbjct: 2525 aatgaggatgataccttccttgatattttccaaggctgaacttggt 2481

Score = 81.8 bits (41), Expect = 2e-12  
Identities = 41/41 (100%)  
Strand = Plus / Minus

Query: 1 atgatcgcccggtgccttttggctgtgcgaagcctccgcag 41

|||||  
Sbjct: 60390 atgatcgcccggtgccttttggctgtgcgaagcctccgcag 60350